



LAS ORQUÍDEAS

BUILDING WITH 42 HOMES, BASEMENT AND SWIMMING POOL

Condominio C-19.1, Parcelas A1-A2, UA1-AT del P.P. Atamaría. Los Belones. Cartagena







- All the work on the screen and foundations shall be performed pursuant to the recommendations of the Geotechnical Study of the ground.

The foundations shall be executed by reinforced concrete slab, laid using HA-25/B/20/lla concrete, produced at plant and poured by concrete pouring skip, with B 500 S steel, with surface finish by vibrating rod.

1.2. WATERPROOFING AND DRAINAGE



- A perimeter drainage system shall be installed in the basement.
- The foundation slab shall be executed on the clearing layer of concrete, formed by a high-quality waterproofing sheet, comprised of a textile layer, an active waterproof lawyer of modified polymers and a waterproof layer of LDPE covered with PP fibres.

2. STRUCTURE



2.1. BEARING STRUCTURE

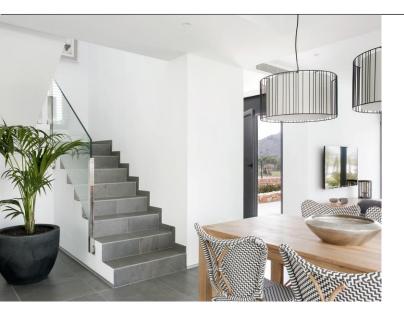
- Pillars of shielded reinforced concrete, made of plant produced HA-25/B/20/IIa concrete, with a free height of up to 3 m. and 40x25 cm. average section.
- Reinforced concrete basement wall with plant produced HA-25/B/20/IIa concrete, poured by concrete pouring skip. B 500 S steel.



2.2. STRUCTURAL FLOOR SLABS

- Horizontal grid slab, with 30=25+5 cm. edge, on continuous formwork system; ribs in situ of 12 cm, interaxis 72 cm; concrete block, 60x20x25 cm., and electrowelded mesh in the compression layer.





- Interior stairs of reinforced concrete with sloping slab, concrete steps clad with porcelain earthenware tiles, set in cement mortar.
- Glass hand-rail 110 cm. high formed by: laminated glass of 10+10 mounted on embedded profile of stainless steel 5 mm. thick.



2.4. INVERTED BEAMS AND PERGOLAS

- The pergolas and inverted beams shall be reinforced concrete.



3. FAÇADES



3.1. BRICKWORK EXTERNAL WALLS

- External wall formed by: exterior layer 11.5 cm. thick of laid brick, triple perforated ceramic bricks for cladding, 24x11.5x11.5 cm, set with industrial cement mortar, with cement rendering applied on the interior wall surface, on the back of the exterior façade layer forming the air chamber.

Free self-supporting backing layer "KNAUF" or similar, made of laminated plasterboard, fixed to the floor slabs by a structure formed by rails and risers.

3.2. EXTERIOR CARPENTRY AND BLINDS

- Anodized anthracite grey coloured aluminium, formed by a sheet of profile fitted with thermal gap, with sub-frame.

Fixed window bays will be installed, and sliding and hinged windows for access to the exterior, as appropriate.





varnish, electro-zinc door 9/10 and reinforcement omegas 9/10. White finish. Security Class 3. Anti-intrusion to UNE EN 1627.

3.4. COMPOUND GATE

- Folding metallic gate for vehicle access.
- Manual opening one-sided metallic gate for pedestrian access.



3.5. PARAPETS AND RAILINGS

- Parapet made of one layer of masonry, 11.5 cm. brick, of triple perforated ceramic brick, clad with industrial cement mortar rendering, grey colour, backed on reinforced concrete, ZP type reinforced concrete parapet.
- Modular railing type, formed by a continuous "U" profile of aluminium alloy with anodized finish, and laminated 8+8 mm. colourless security glass.

3.6. EXTERIOR FINISHES

- The rain gutters will be made of polymer polished surface concrete.



3.7. GLAZING

- Insulating double glazing, 8/12/6 (variable to EEC specifications), with fillers and continuous sealing.
- Shower partitions: glazed with satin coated 8 mm. tempered glazing, fixed on frames, cold sealed with colourless synthetic (non-acrylic) silicone. Includes doors with different opening types, according to the project.







4.1. PARTITIONS AND BACK-CLADDING



- Free self-supporting back-cladding, "KNAUF" system or similar, made of two sheets of plasterboard fixed to the floor slabs by a structure formed by rails and risers; 75 mm total thickness; 400 mm separation between risers.
- Multiple system partition, "KNAUF" or similar, made of plasterboard, on auto-adhesive dilation acoustic strip, formed by a simple structure of risers, and acoustic insulation by semi-rigid panel of rockwool 65 mm thick; 120 mm total thickness.

4.2. INTERIOR CARPENTRY AND WARDROBES



- One leaf internal doors of 210x82,5x4 cm., of MDF board, pre-lacquered in white, with horizontal slots every 50 cm.
- Prefabricated imbedded cabinet with sliding doors, of MDF board panelling, pre-lacquered in white.

5. PLUMBING AND DRAINAGE

5.1. SANITARYWARE

5.1.1. TOILET

- Wall-hung toilet of vitrified porcelain, Roca or similar brand, seat with soft close hinges, installation on light wall. Includes fixing kits and connection tubes.



5.1.2. HAND BASIN

- Basin of sanitary porcelain, Roca or similar, equipped with mixer taps.





5.1.3. SHOWER

- High range acrylic shower base, white colour.
- Thermostatic wall mixer taps for bath/shower, chrome finish; enables temperature and flow to be limited.

5.2. PLUMBING

- The plumbing installation shall be performed according to the drawings, the Basic Regulations for installations and the Building Technical Code.

5.3. DRAINAGE NETWORK

- To be made of PVC tube with mineral charge, with sufficient sections for proper operation according to the Building Technical Code.

6.1. SATELLITE TELEVISION

- Preinstallation of individual satellite TV system "TELEVES" (no. of sockets by home type).

6.2. TELEPHONE

- Individual telephony system. (no. of sockets by home type).

6.3. DOMOTICS

- Domotics installation to control the home (electricity, lights, electronics, etc.), using available techniques and technologies. Includes alarm system and preinstallation of video-surveillance system.

6.4. VIDEO-DOOR STATION

- Digital video door station, with coded keypad, information module and colour camera.



7. ROOFS



7.1. ACCESSIBLE ROOFS

- Accessible flat roof, non-ventilated, with fixed paving, inverted type, slope of 1% to 5% for private pedestrian traffic comprised of:

FORMING SLOPES,

ADHERED DOUBLE WATERPROOFING LAWYER

SEPARATION LAYER UNDER INSULATION

THERMAL INSULATION

SEPARATION LAYER UNDER PROTECTION

PROTECTION LAYER



7.2. NON-ACCESSIBLE ROOFS (GRAVEL)

 Non-accessible flat roof, non-ventilated, with fixed paving, inverted type, slope of 1% to 5% comprised of:

FORMING SLOPES,

ADHERED DOUBLE WATERPROOFING LAWYER

SEPARATION LAYER UNDER INSULATION

THERMAL INSULATION

SEPARATION LAYER UNDER PROTECTION

PROTECTION LAYER



8. CLADDING



8.1. EXTERIOR CLADDING

- Cladding exterior walls with single layer mortar, with fine rendered finish, 15 mm thick, white colour 100, applied by machine, reinforced with anti-alkali mesh, including material changes.
- Stairwells clad with natural stonework.



- Decorative base on façades with silicate paint, colour white, with finishing coat in continuous two-layer rendering; cleaning and sanding prior of the traditional mortar base, priming layer using a potassium silicate-based primer, acrylic emulsion, and two finishing coats.

8.4. INTERIOR PAINT

- Two coats of white plastic paint with smooth texture, colour to be chosen, matt finish, on walls and horizontal surfaces of laminated plasterboard, primer coat and two finish coats.



8.5. TILING AND CLADDING

- In bathrooms, tiling with porcelain stoneware, size 60 x 30 cm, set on a supporting surface of laminated plasterboard interior wall.
- In kitchens, tiling with porcelain stoneware tiles, size 60 x 30 cm, set on a supporting surface of laminated plasterboard interior wall.

8.6. SUSPENDED CEILING

 Continuous suspended ceiling, located at different heights, with metallic structure (12.5+47), formed by a sheet of laminated plaster.

Forming insets in suspended ceilings for curtain rails using prefabricated plasterboard, thickness 15 mm, "KNAUF" type or similar.



9.1. INTERIOR AND EXTERIOR PAVEMENT

- Interior flooring of porcelain stoneware ceramic tiles, wood finish, size 120 x 20 cm.
- Interior flooring of porcelain stoneware ceramic tiles, size 60 x 60 cm. Anti-slip treatment in exterior.



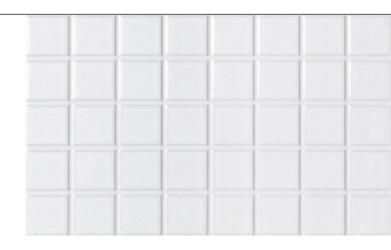


10.1. SWIMMING POOL

- Community pool size $16.00 \times 5.00 \text{ m}$, overflow at one side, comprised of: filtering equipment, closed circuit of PVC pipes and accessories: 1 bottom drain with anti-entrapment cover, 8 impeller nozzles and 4 skimmers.

Vitreous coating with white gresite, 2.5 x 2.5 cm, smooth series.

- Children's pool of 5.00 x 5.00 m.
- Forming the pool vessel by projecting gunite concrete layer 20 cm thick, quick setting.





11. PLOT LANDSCAPING



11.1. FILLING

- Open cast filling with material from the actual excavation; and compacting to 95% of Modified Proctor to improve the resistant properties of the supporting ground.
- Imported layer of fertilised topsoil, 30 cm thick, and preparation of the ground, tilling, shredding, clearing, levelling and fertilising for planting, performed by manual means.



11.2. PLOT ENCLOSURE (CONTAINING WALLS)



- Earth contained by limestone visible masonry walls, set with industrial cement mortar.



12.1. AIR CONDITIONING, HEATING AND SANITARY HOT WATER

- Aerothermal heating system, air conditioning and sanitary hot water.
 High efficiency fan coils.
 DOUBLE FLOW mechanically controlled ventilation.

^{*} The qualities and finishes described above shall be considered during execution of the works, although they may be subject to amendment in order to include improvements of a technical, financial and/or aesthetic nature, adjusted to quality minimum standards, always pursuant to the criteria of the Architect-Author of the Project.

